

What is claimed is:

1. A dielectric ceramic composition including at least
a main component containing a dielectric oxide
5 having a composition expressed by $[(Ca_xSr_{1-x})O]_m[(Ti_yZr_{1-y}-zHf_z)O_2]$,
a first subcomponent containing a Mn oxide and/or
an Al oxide, and
a glass component:
10 wherein "m", "x", "y" and "z" indicating
composition mole ratios in the formula included in said
main component are in relationships of
$$0.90 \leq m \leq 1.04$$
$$0.5 \leq x < 1$$
$$0.01 \leq y \leq 0.10$$
$$0 < z \leq 0.20.$$
2. The dielectric ceramic composition as set
forth in claim 1, including 0.2 to 5 mol% of said Mn
20 oxide in terms of MnO and 0.1 to 10 mol% of said Al oxide
in terms of Al_2O_3 with respect to 100 mol% of said main
component.
3. The dielectric ceramic composition as set
25 forth in claim 1 or 2, including 0 to 2.5 mol% (note that

0 is excluded) of a V oxide in terms of V_2O_5 with respect to 100 mol% of said main component.

4. The dielectric ceramic composition as set forth in any one of claims 1 to 3, wherein said glass component contains at least SiO_2 as a main component.

5. The dielectric ceramic composition as set forth in any one of claims 1 to 4, wherein said glass component is expressed by $[(Ba_vCa_{1-v})O]_wSiO_2$, "v" and "w" in the composition formula of said glass component are in ranges of $0 \leq v \leq 1$ and $0.5 \leq w \leq 4.0$, and said glass component is included by 0.5 to 15 mol% with respect to 100 mol% of said main component.

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6. The dielectric ceramic composition as set forth in any one of claims 1 to 5, including at least one of rare earth elements including Sc and Y by 0.02 to 1.5 mol% with respect to 100 mol% of said main component.

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7. The dielectric ceramic composition as set forth in any one of claims 1 to 6, including at least one of Nb, Mo, Ta, W and Mg by 0.02 to 1.5 mol% with respect to 100 mol% of said main component.

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8. The dielectric ceramic composition as set forth in any one of claims 1 to 7, wherein "m" indicating a composition mole ratio in the formula contained in said main component is $1.005 \leq m \leq 1.025$.

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9. A production method of the dielectric ceramic composition as set forth in any one of claims 1 to 8, comprising the steps of:

preparing materials of said dielectric ceramic
10 composition;

mixing said materials;

obtaining a calcinated substance by collectively
calcinating said mixed materials to bring solid-phase
reaction by using a dry synthesis method; and

15 obtaining said dielectric ceramic composition by
performing main firing on said calcinated substance.

10. An electronic device having a dielectric
layer:

20 wherein said dielectric layer is composed of the
dielectric ceramic composition as set forth in any one of
claims 1 to 8.

11. An electronic device having alternately
25 stacked internal electrodes and dielectric layers,

wherein said dielectric layers are composed of the dielectric ceramic composition as set forth in any one of claims 1 to 8.

5 12. The electronic device as set forth in claim 11, wherein said internal electrode includes at least nickel.

 13. The electronic device as set forth in claim
10 11 or 12, wherein an average particle diameter of a crystal in said dielectric layer is 2 μm or less.

 14. A production method of the electronic device as set forth in any one of claims 11 to 13, wherein main
15 firing at 1300°C or lower is performed on said internal electrodes and dielectric layers at a time.